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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,291	09/10/2003	Naoyuki Tamura	648.41957CX1	2459

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EXAMINER

MOORE, KARLA A

ART UNIT PAPER NUMBER

1763

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,291

Applicant(s)

TAMURA, NAOYUKI

Examiner

Karla Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/218,406.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0903</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 5-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claims 5 and 6 recite the limitation "*said predetermined position*". There is insufficient antecedent basis for this limitation in the claim. Examiner has assumed Applicant intended for the claim to read "to a position for *said predetermined treatment*". Correction and/or clarification is requested.
3. Further, claim 8 recites the limitation "the stage". There is insufficient antecedent basis for this limitation in the claim. Examiner has assumed Applicant intended for the claim to read "the predetermined treatment". Correction and/or clarification is requested.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,452,521 to Niewmierzycki in view of U.S. Patent No. 5,512,320 to Turner et al.
6. Niewmierzycki discloses a vacuum processing method for transferring a wafer to a predetermined position within a vacuum processing chamber (31B-E) using a transfer equipment and performing a predetermined treatment (column 5, row 20-21) to said wafer in said vacuum processing chamber; said method comprising: a vacuum transfer step of transferring a wafer received to a predetermined position within said vacuum processing chamber using a vacuum transferring equipment (14) disposed within a vacuum transfer chamber (33) connecting the atmospheric air and said vacuum processing chamber (column 5, rows 19 and 20); and a step of detecting the displacement of said wafer being transferred

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using a wafer position sensor (32A) disposed near an ingress path leading to said vacuum processing chamber (column 5, rows 7-10).

7. However, Niewmierzycki fails teach an atmospheric transfer step of transferring the wafer in atmospheric air to a vacuum transfer equipment using an atmospheric transfer equipment disposed in atmospheric air.

8. Turner et al. teach atmospheric transfer step of transferring a wafer in atmospheric air to a vacuum transfer equipment using an atmospheric transfer equipment disposed in atmospheric air for the purpose of retrieving a substrate from a storage cassette and loading a substrate into a vacuum system (via a loadlocking chamber) (column 5, rows 60-67).

9. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided an atmospheric transfer step in Niewmierzycki in order to retrieve a substrate from a storage cassette and load a substrate into a vacuum system as taught by Turner et al.

10. With respect to claim 6, the processing method described above further comprises: a step of correcting the position of said wafer based on the be displacement being detected using a correction means (34A; column 5, rows 10-18) for correcting the position of said wafer based on a result of the detection performed by said wafer position sensor.

11. With respect to claim 7/5 and 7/6, said step of detecting the displacement of said wafer comprises a step of detecting the rim position of said wafer being transferred in the vacuum transfer step (column 6, rows 7-16) using at least three optical sensors (42A-D).

12. With respect to claim 8/5 and 8/6, initial positioning of said wafer is performed in atmosphere (when a wafer is first picked up it will automatically acquire a first position on the atmospheric transfer equipment), and the displacement of said wafer is detected directly before the *stage*/processing within said vacuum processing chamber (as is described above).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karla Moore whose telephone number is 571.272.1440. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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16 April 2005

Parviz Hassanzadeh
Supervisory Patent Examiner
Art Unit 1763